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For SUPERCRITICAL COMPOSITIONS FOR REMOVAL OF ORGANIC MATERIAL AND METHODS OF

**USING SAME** 

## Amendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the aboveidentified application:

# 1-19. (Canceled)

- 20. (Currently Amended) A The composition of claim 19 comprising sulfur trioxide ( $SO_3$ ) in a supercritical state, wherein the composition further comprises at least one oxidizer selected from the group consisting of sulfur dioxide ( $SO_2$ ), nitrous oxide ( $N_2O_3$ ), NO, NO<sub>2</sub>, ozone ( $O_3$ ), hydrogen peroxide ( $H_2O_2$ ),  $F_2$ ,  $Cl_2$ ,  $Br_2$ , and oxygen ( $O_2$ ), and wherein the composition is an organic material removal composition.
- 21. (Previously Presented) The composition of claim 20, wherein the at least one oxidizer is in a supercritical state.

#### 22-24. (Canceled)

25. (Previously Presented) A composition comprising sulfur trioxide (SO<sub>3</sub>) in a supercritical state and an oxidizer, wherein the composition is an organic material removal composition.

#### 26. (Canceled)

27. (Previously Presented) A composition comprising:

a first component selected from the group consisting of carbon dioxide (CO<sub>2</sub>), ammonia (NH<sub>3</sub>), H<sub>2</sub>O, nitrous oxide (N<sub>2</sub>O), carbon monoxide (CO), nitrogen (N<sub>2</sub>), helium (He), neon (Ne), argon (Ar), krypton (Kr), and xenon (Xe);

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a second component selected from the group consisting of sulfur dioxide (SO<sub>2</sub>), nitrous oxide (N<sub>2</sub>O), NO, NO<sub>2</sub>, ozone (O<sub>3</sub>), hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>), F<sub>2</sub>, Cl<sub>2</sub>, Br<sub>2</sub>, and oxygen (O<sub>2</sub>); and sulfur trioxide (SO<sub>3</sub>) in a supercritical state, wherein the composition is an organic material removal composition.

- 28. (Previously Presented) The composition of claim 27, wherein the first component is carbon dioxide.
- 29. (Previously Presented) The composition of claim 27, wherein a ratio of the first component to the total of the second component plus sulfur trioxide is about 1:100 by volume to about 100:1 by volume.
- 30. (Canceled)
- 31. (Previously Presented) The composition of claim 28, wherein a ratio of carbon dioxide:sulfur trioxide is about 10:1 by volume to about 1:1 by volume.
- 32. (Previously Presented) The composition of claim 27, wherein the first component is in a supercritical state.

#### 33-42. (Canceled)

- 43. (Previously Presented) The composition of claim 27, wherein the second component is in a supercritical state.
- 44. (Previously Presented) The composition of claim 27, wherein the first component and the second component are both in supercritical states.

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### 45. (Canceled)

- 46. (Currently Amended) The composition of claim 20 19 further comprising a component selected from the group consisting of hydrogen chloride, hydrogen bromide, hydrogen fluoride, ammonium fluoride, tetramethylammonium fluoride, tetramethylammonium hydroxide, beta-diketones, fluorinated-diketones, organic acids, and combinations thereof.
- 47. (Previously Presented) The composition of claim 25 further comprising a component selected from the group consisting of hydrogen chloride, hydrogen bromide, hydrogen fluoride, ammonium fluoride, tetramethylammonium fluoride, tetramethylammonium hydroxide, beta-diketones, fluorinated-diketones, organic acids, and combinations thereof.
- 48. (Previously Presented) The composition of claim 27 further comprising a component selected from the group consisting of hydrogen chloride, hydrogen bromide, hydrogen fluoride, ammonium fluoride, tetramethylammonium fluoride, tetramethylammonium hydroxide, beta-diketones, fluorinated-diketones, organic acids, and combinations thereof.

#### 49. (Canceled)

- 50. (Previously Presented) A composition comprising sulfur trioxide (SO<sub>3</sub>) in a supercritical state and an oxidizer, wherein the composition is a composition for removing exposed organic material from an object.
- 51. (Previously Presented) A composition comprising:

a first component selected from the group consisting of carbon dioxide (CO<sub>2</sub>), ammonia (NH<sub>3</sub>), H<sub>2</sub>O, nitrous oxide (N<sub>2</sub>O), carbon monoxide (CO), nitrogen (N<sub>2</sub>), helium (He), neon (Ne), argon (Ar), krypton (Kr), and xenon (Xe);

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a second component selected from the group consisting of sulfur dioxide (SO<sub>2</sub>), nitrous oxide (N<sub>2</sub>O), NO, NO<sub>2</sub>, ozone (O<sub>3</sub>), hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>), F<sub>2</sub>, Cl<sub>2</sub>, Br<sub>2</sub>, and oxygen (O<sub>2</sub>); and sulfur trioxide (SO<sub>3</sub>) in a supercritical state, wherein the composition is a composition for removing exposed organic material from an object.

#### 52. (Canceled)

- 53. (Previously Presented) A composition comprising sulfur trioxide (SO<sub>3</sub>) in a supercritical state and an oxidizer, wherein the composition is a composition for removing exposed organic material from a substrate assembly.
- 54. (Previously Presented) A composition comprising:

a first component selected from the group consisting of carbon dioxide ( $CO_2$ ), ammonia ( $NH_3$ ),  $H_2O$ , nitrous oxide ( $N_2O$ ), carbon monoxide (CO), nitrogen ( $N_2$ ), helium ( $N_2O$ ), argon ( $N_2O$ ), argon ( $N_2O$ ), argon ( $N_2O$ ), and xenon ( $N_2O$ );

a second component selected from the group consisting of sulfur dioxide (SO<sub>2</sub>), nitrous oxide (N<sub>2</sub>O), NO, NO<sub>2</sub>, ozone (O<sub>3</sub>), hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>), F<sub>2</sub>, Cl<sub>2</sub>, Br<sub>2</sub>, and oxygen (O<sub>2</sub>); and sulfur trioxide (SO<sub>3</sub>) in a supercritical state, wherein the composition is a composition for removing exposed organic material from a substrate assembly.

- 55. (New) The composition of claim 20 further comprising a substrate assembly in contact with the organic material removal composition.
- 56. (New) The composition of claim 25 further comprising a substrate assembly in contact with the organic material removal composition.

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57. (New) The composition of claim 27 further comprising a substrate assembly in contact with the organic material removal composition.

- 58. (New) The composition of claim 50 further comprising a substrate assembly in contact with the composition for removing exposed organic material from an object.
- 59. (New) The composition of claim 51 further comprising a substrate assembly in contact with the composition for removing exposed organic material from an object.